

REMARKS

After this amendment, claims 1-13 and 15-29 remaining pending in this application.

Filed concurrently herewith is form PTO-1449 listing the references uncovered in a French Search Report, together with copies of the report and the references. Enclosed with the PTO-1449 is a fee sheet in compliance with 37 CFR 1.17(p).

By this amendment, we have canceled claim 14 and combined it with claim 1 to make the currently amended claim 1. We have made all of the other dependent claims depend on this amended claim 1. We have also added independent claims 26, 27, 28 and 29 by respectively combining with claim 1, claims 20 (which in turn depends on claim 19), claim 3, claim 7 and claim 12 with claim 1.


Since the examiner has indicated that claims 14 and 20 would be allowable if rewritten in independent form including all the limitation of the base claim and any intervening claims (page 3 of the Office action of October 17, 2003), the new claims 1-13 and 15-25 are now allowable. Independent claim 26 which incorporates the allowed claim 20 also is allowable. ✓

As to the new claims 27, 28 and 29, we submit the following remarks. ✓

By comparing the current claims with the rejection of old claims, it is clear that the examiner's current rejection would correspond to a rejection of claim 27 (old 1 and 3) over Mathis, Fujino, Ishida and Yoshiume (page 2 of the Office action), and claim 28 (old 1 and 7) over Mathis, Fujino and Ishihara (page 2 of the Office action), and claim 29 (old 1 and 12) over Mathis, Fujino, ^{Ishida} Ishihara, Yoshiume and Cummins (page 3 of the Office action).

The central combination to the rejection of claims 27, 28 and 29 is the combination of Mathis, Fujino and ^{Ishida} Ishihara. We submit that this combination, even when further combined with the other references, lacks the elements recited in these claims. We present the arguments regarding the combination of Ishihara and Mathis which forms the basic combination to meet the limitations of these claims, keeping in mind that Fujino does not add to the recited structure. We present a summary of our invention and compare it with the disclosure of Ishihara and Mathis.

In our invention, the first fuel pump 6 operates with variable pumping power.

The examiner continues to argue that in ^{Ishida} Ishihara, the first pump, because of the valve 64, pumps variably. He designates this pump as the first pump (see Office action of October 17, 2003, page 3, last three sentences). We submit that the pump 46 is not the first pump. Therefore, in our opinion, the examiner's arguments completely miss the target. In ^{Ishida} Ishihara, the pump 52 is the first pump, and consequently the pump 46 is the second pump. 

In Mathis, the first pump 16 unambiguously operates with a constant pumping quantity. Regardless of how much fuel is withdrawn, what flows through the first pump 16 is always the constantly identical amount. To further clarify the above point, consider the following.

If in Mathis the valve 18 is wide open, then much of the constant pumping quantity from the first pump 16 flows to the second pump, and only little flows to the pressure limiting valve 17. On the other hand, if the valve 18 is not open very much, then little fuel flows to the second pump 4 and in turn much fuel flows through the pressure limiting valve 17. The total of the two partial flows pumped by the first pump 16 remains the same, regardless of the position of the valve 18.

If the valve 18 is wide open, then much fuel flows through the second pump 4, and if the valve 18 is not open very much, little fuel flows through the second pump 4.

This means the following: with the valve 18, only the fuel quantity through the second pump 4, but not the fuel quantity through the first pump 16, can be varied. In other word, regardless of the position of the valve 18, the same constant quantity of fuel is always pumped by the first pump 16. |

Again, note that Fujino is used only to assert the fact that it was common to regulate the flow to the high-pressure pump based on engine parameters, and is not being used to modify the structural elements of the system.

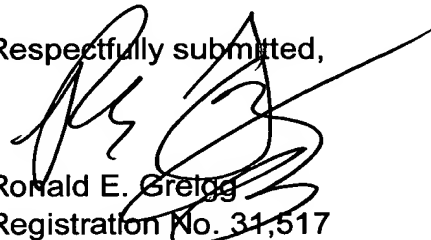
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Therefore, the combination of Mathis, Fujino and Ishihara does not meet the structural arrangements of the elements which are recited in each of these claims. Because it is the combination of Mathis and Ishihara which forms the kernel of each rejection, the current rejection which would correspond to the rejection of each of the claims 27, 28 and 29 is without merit.

For this reason, we submit that the rejection of independent claims 27, 28 and 29 over the applied art should also be withdrawn.

Consequently, we believe that claims 1-13, and 15-29 are distinguishable over the prior art. Their allowance is respectfully requested.

Respectfully submitted,



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